

**SDWA Lab Certification Program:  
On-Site Review**

Rev. 10-24-06

**West Virginia Department of Health and Human Resources  
Bureau for Public Health  
Office of Laboratory Services  
Environmental Chemistry Laboratory Section  
167 11th Avenue  
South Charleston, WV 25303**

**On-Site September 20-22, 2006**

**Survey by**

**George Long  
Joseph Slayton**

**U.S.E.P.A. - Region III  
Analytical Services and Quality Assurance Branch  
701 Mapes Road  
Ft. Meade, Maryland 20755-5350**

## **Introduction:**

On September 20-22, 2006 an on-site review was conducted of the West Virginia's SDWA Laboratory Certification Program of the West Virginia Department of Health and Human Resources, Bureau of Public Health, Office of Laboratory Services. Laboratory SDWA certifications for chemistry are conducted by Larry Duffield, Chemistry Program Manager I (organic and inorganic chemistry Certification Officer-CO), Greg Young, Chemist II (organic and inorganic chemistry CO) Patrick Marchio, Chemist I (inorganic chemistry CO) and Rebecca Hill, Office Assistant II (application processing, records/data base table and file tracking). Laboratory SDWA certifications for microbiology are conducted by Thomas Ong, Microbiologist Program Manager, Tracy Goodson, Microbiologist III, Michael Flesher, Microbiologist III and Rebecca Hill, Office Assistant II (application process, maintains chemistry certification records). Charlotte Billingsley, Associate Director oversees the Laboratory Certification Program and reports directly to Andrea Labik, Director Office of Laboratory Services.

The laboratory certification program is in support of the WV Office of Environmental Health Services (OEHS).

Reciprocity is not part of the WV SDWA code as the WV certification program retains the option to inspect any laboratory certified by the State.

In addition, to commercial laboratories, the WV laboratory certification program reviews and certifies a satellite laboratory to the WV Laboratory Services for microbiology (Kearneysville, WV).

This review was conducted through interviews, laboratory records/file review, review of program Standard Operating Procedures (SOPs) and a joint inspection with the WV Laboratory Certification Program.

This program assessment was conducted by George Long, Chemist and Joseph Slayton, Technical Director, USEPA, Region III, Analytical Services and Quality Assurance Branch, 701 Mapes Road, Fort Meade, Maryland 20755-5350. This review was based on the requirements listed in the Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and Procedures Quality Assurance, EPA 815-R-05-004, January 2005.

## **Program Overview & Observations:**

The WV Laboratory Certification Program is based upon the Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and Procedures Quality Assurance, EPA 815-R-05-004, January 2005. and upon the 40 CFR Part 141-143 SDWA requirements, as well as, upon the requirements listed in the analytical methods referenced in these documents. This includes

the requirement that laboratories successfully analyze at least one proficiency testing sample per analyte per method per year. All in-state laboratories are also to have procedures and documentation, which are found satisfactory by an on-site inspection by State COs at least once every three years. All of the WV SDWA COs are trained professionals with years of laboratory experience.

A number of innovations have been implemented to streamline and improve the program including:

- Development of numerous certification status tracking tables (e.g., Laboratory Certification Status Review Sheet, Laboratory Certification Tracking Sheet, and PT tracking spreadsheet);
- automated tools (e.g., automated microbiology onsite announcement letter);
- the "Chemistry Proficiency Testing Water Study Enrollment Form" to help close a possible vulnerability with the Agency's PT program in that laboratories could pick and chose among the studies reported to a State Certification program.
- presurvey forms to better gather background information prior to an assessment. These are very user friendly and EPA Region 3 plans to use the forms for its program.
- the WV web site listing current laboratory SDWA certification status is a great tool and is being kept up to date.

In addition, the certification program has good documentation of procedures with chemistry and microbiology certification SOPs (additional details listed below).

Given that analyses performed by commercial laboratories represent a significant portion of the WV's SDWA monitoring program, on-site reviews and certifications of commercial laboratories are very important in helping assure the quality of drinking water in West Virginia.

### **Personnel/Training/Vacancies:**

Since the last oversight review performed by EPA in 2003, an additional chemist has completed the EPA COs training course (Patrick Marchio). Currently the WV program has two chemistry COs certified for inorganic and organic chemistry and one CO for inorganic chemistry. Unfortunately, the loss of organic analysis capability from the Environmental Chemistry section in 1997 has not made it possible for the chemistry COs to gain hands-on experience with the SDWA methods for organics. As a result, the review of SDWA organic procedures requires methods review and preparation of checklists by the COs as part of the preparation for assessments. Also, Martha McElfresh, recently hired for the Environmental Chemistry Laboratory Section, has experience performing organic analyses and will be a helpful resource for the assessors.

The Microbiology section has also gained an additional CO since the last program review (Michael Flesher).

As part of the on-the-job-training of new COs, they performed inspections jointly with the more experienced COs.

### **Certification Program Documentation:**

The WV laboratory microbiology certification program has developed an SOP entitled: "Drinking Water Certification Program-Microbiology" (revision 8/21/01). This document includes the following topics: Introduction (cites various supporting federal regulations and the use of the EPA Lab Certification Manual as the focus for the WV Microbiological program); Laboratory Certification Officer (qualifications); Certification Parameters; Certification Renewal (table listing forms, mailing label files, etc.); On-site Evaluations (checklists, procedures, reports, follow-up, etc.); Adding a Certified Laboratory (In-State); Adding a Certified Laboratory (Out-of-State); Performance Evaluation Samples; Records Retention and Storage; Drinking Water Laboratory Certification Renewal (form); Laboratory Information Form: Drinking Water Laboratory Certification Renewal \*FINAL NOTICE\* (form); Drinking Water Certificate; Water Survey Schedule (template to track projected on-site inspections); Presurvey Package (cover letter and pre-survey form); On-site Inspection Report (template); On-site Evaluation Checklist; Follow-up Letter (reminder notice template for response to the on-site inspection); Follow-up Letter (2) (template for responses that were not acceptable); tracking chart for on-site evaluations (tracking corrective actions and correspondence associated with on-site inspections); Application for Laboratory Certification (form); Letter in Response to Out-of-State applications (Note: includes WV's approach to "Reciprocity"); Letter Noting Receipt of Application (form letter); Key to List of Approved Tests (the WV Laboratory Certification Program groups analytes for certification); and a "Listing of Labs Certified in WV" (listed by analyte groups for both Microbiology and Chemistry).

The SOP for WV's Environmental Chemistry has been updated since the last on-site assessment.

The Standard Operating Procedure for Environmental Chemistry Drinking Water Laboratory Certification Program (June 2005) includes: Scope; certified laboratory list; fees for certification, certification status designations; laboratory quality assurance plan; standard operating procedure; corrective action reports for unacceptable PTWS; laboratory evaluation process; office of environmental health services reporting policy; trace metals; inorganics; organic pesticides; organic herbicides; organics; trihalomethanes (THM); organics volatile organic compounds (VOC); haloacetic acids (HAA5); synthetic organic compounds (SOC); organization charts; process flow charts; WV certified analytes for drinking water; renewal and out-of-state certification application; pre-survey packet for on-site audit; proficiency testing water study tracking spreadsheet; laboratory status sheet; chemistry proficiency testing water study enrollment.

The QA Manual for the Office of Laboratory Services serves as the core/umbrella quality system policy document for laboratory operations, as well as, the laboratory certification program.

## **Laboratory Certification Records Management:**

The documentation for the Microbiology and Chemistry Certification Program was complete and well organized. These records allowed the review of PT data, on-site reports, corrective actions and certification status and official communications. The records of out-of-state laboratories and PT records for microbiology would benefit from clerical support. The PT program is well documented and the laboratories have been officially notified of the schedule and procedures (both microbiology and chemistry). Schedules of PTs and on-sites and certification issuance are tracked and organized in tabular form. Continued leadership by the Associate Director and administrative assistance/clerical support have significantly improved records management in the chemistry certification program.

## **On-site Laboratory Inspections:**

The EPA assessment team observed the on-site assessment of the West Virginia American Water Company (WVAWC) by Tom Ong and Mike Flesher. The inspectors effectively utilized a checklist for microbiology and the inspection was thorough and professional. Technical advice and assistance was provided to help Tom Holbrook, WVAWC Laboratory Director, to resolve an issue with possible contamination of Colilert bottles. Also, a "QC quick list" /QC summary for colilert will be provided to the laboratory to be used for future self-reviews.

All required on-site assessments and follow-up corrective actions and communications have been completed for chemistry and microbiology.

The program issues certificates (hardcopy) each year which include method and analytes. The target date is the first day of the new year.

Consistent with the Federal Register, the WV certification program does not include certification or approval for laboratories for the following analytes: turbidity, pH, silica, PO<sub>4</sub>, conductivity, TOC, SUVA, calcium/hardness and alkalinity.

## **Findings:**

None.

## **Recommendations:**

The following suggestions are offered for the continuous improvement of the program.

- a. Efforts should be continued to clean-out older files in microbiology file cabinets to make room to allow organization and filing of out-of-State microbiology laboratory certification

records (same organization/records management as for in-state laboratories).

b. Clerical help is needed in the microbiology section. Valuable time of professionals is spent filing and organizing the many records associated with laboratory certification, microbiological analysis records, and bottle requests.

c. Efforts to unify the chemistry and microbiology programs should be continued, e.g., currently there is a joint application form "Application for laboratory certification for drinking water analyses in conformance with EPA Safe Drinking Water Act", which are processed at the Big Chimney location. Significant synergy may be gained by joint efforts, e.g., the status table (the "big board") used for chemistry certifications has proven as an effective reminder tool and may be of use to the microbiology as well. The microbiology program should consider utilizing the "PT enrollment Form" developed for chemistry PTs.

d. The chemistry PT records are tracked on a spread sheet. The microbiology records are as a collection per year in a single file. The microbiology PT records should be organized to allow easier review.

e. The following are suggestions for the certification program SOP/s: should include more details on records management, e.g., how the laboratory files are organized/arranged, length of time records are retained (p. III-8 of CLADW suggests at least 6 years), archive procedures including labeling and/or discarding outdated records, document control numbers for laboratory files); add a description of the certification status tracking ("board") and/or reminder calendar; describe the certificate code system including "M" and "C" designation; and describe the use of method checklists as a tool for the chemistry assessors.

f. Electronic files are suggested for PT records especially for microbiology. A high speed scanner may be helpful.

g. A minimum frequency should be set to review the certification program SOP/s (e.g., yearly) with formal revisions as needed. This should be added to the QA Manual as a laboratory certification policy.

h. A schedule for routine update of the Web site listing of laboratory certification status should be set (e.g., March of each year). Also a target turn-around for other individual laboratory updates that occur during the year should be set (e.g., 30 days). This should be added to the QA Manual as a laboratory certification policy.

i. The program SOP/s should include a reference section that includes the EPA Laboratory Certification Manual, supporting State code and also the Office of Laboratory Services's Manual of Quality Assurance.

j. The certification program should provide guidance to WV laboratories on laboratory

ethics/data integrity.

k. The certification program should share accomplishments with its OEHS customer, e.g., continuous improvement of program documentation, status tracking and outreach efforts.

l. The tracking table ("big board") should be backed up electronically.

m. The certificate of completion from EPA's Certification Officer training course was missing from the file for Tracy Goodson. Another copy should be obtained.

### **Summary:**

WV has a good program for the SDWA laboratory certification that keeps on track with the required schedule of on-site assessments, assessment reports and follow-up, as well as, with PT tracking and follow-up. Certificate issuance provides the necessary information for updating of the WV web site (laboratory's certification status), which is kept current to accurately reflect certification status of laboratories. Parameter attachments to the issued certificates are method by method and analyte by analyte.

### **EPA Assessors:**

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George Long	10/24/06
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Joseph Slayton	10/24/06
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Charles Robinette  
<crobinette@wvdhhr.org>  
01/03/2007 08:44 AM

To Joe Slayton/ESC/R3/USEPA/US@EPA  
cc Walter Ivey <walterivey@wvdhhr.org>  
bcc

Subject Re: Action Item from Dec. 2006 R3 SDWA Certification  
Officers Meeting

As requested. If you need additional details, please advise.

Charles Robinette, Special Projects Coordinator  
WV Department of Health and Human Resources  
Bureau for Public Health  
Office of Environmental Health Services  
Environmental Engineering Division  
Capitol and Washington Streets  
1 Davis Square, Suite 200  
Charleston, WV 25301-1798  
(304) 558-6714

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>>> <Slayton.Joe@epamail.epa.gov> 12/24/2006 1:42:19 PM >>>  
DanH/BarbaraT (if I have the wrong folks please forward this message):  
One of the actions items I received from a recent meeting of State/EPA  
SDWA assessors and cert. Program Managers was to gather information on  
Region 3 State's requirements for:

1). training of drinking water samplers/collectors  
Operators are trained to collect bacteriological samples through the  
Class I training class, and Class I-D training class. We also provide  
this training for "authorized collectors", for those persons that are  
not associated with a public water system, such as contractors for  
public water systems.

2). if this includes training on any analyses such as field type  
analyses (those with 15 minute technical holding times--pH, Temp.,  
Res.  
Cl2).

The training classes includes training on measurements of pH,  
temperature and residual chlorine measurements.

3). Also, I was to find out if the States formally "certify" such  
individuals.  
Persons authorized to collect samples are either "certified operators"  
or "authorized collectors".



Please just fill in the answers and return the E-mail.

Thanks for your help with gathering this information-- JoeS

Joe Slayton  
Technical Director  
Office Analytical Services and Quality Assurance  
USEPA Environmental Science Center  
701 Mapes Road  
Ft. Meade, MD 20755-5350

410-305-2653  
Fax 410-305-3095

WV 2006 on-site

Lab Cert Program  
Follow up to inspection  
we observed



STATE OF WEST VIRGINIA  
DEPARTMENT OF HEALTH AND HUMAN RESOURCES  
**ENVIRONMENTAL MICROBIOLOGY**

Joe Manchin III  
Governor

Martha Yeager Walker  
Secretary

November 28, 2006

David Peters  
West Virginia American Water  
Kanawha Valley District  
P.O. Box 1906  
Charleston, WV 25327

Dear Mr. Peters,

The response to the September 21, 2006 on-site evaluation was received on October 13, 2006. After a review of the documents submitted, it was determined that all of the deviations cited during the September 21, 2006 on-site evaluation have been adequately addressed and corrected. Therefore, the laboratory's status will be listed as:

**Fully Certified for the Microbiological Analysis of Drinking Water: Total Coliforms by SM 9223B (Enzyme Substrate – Colilert) and *E. coli* by SM 9223B (Enzyme Substrate – Colilert).**

Please note, Analyst "JJ" has the correction factors on the Thermometer Calibration Form backwards (all of the "+"s" should be "-s" and vice versa). This is an Excel Spreadsheet so it may be beneficial to electronically enter the data. The computer will calculate the correction factor and determine the appropriate comment ("Acceptable" or "Not Acceptable" and why).

The following analyst satisfactorily demonstrated the procedures listed above during the on-site evaluation: David Peters. This certification will remain valid until September 2009 pending successful participation in annual proficiency testing, submission of the annual renewal packet and successful performance during any on-site evaluations that may occur during that time period.

If there are any questions, or further assistance is needed, please do not hesitate to contact this office. The next scheduled on-site evaluation will be on or before September 2009.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas L. Ong".

Thomas L. Ong, Microbiologist Supervisor  
Chief – Laboratory Certification Officer

---

BUREAU FOR PUBLIC HEALTH  
OFFICE OF LABORATORY SERVICES  
167 – 11<sup>th</sup> Avenue  
South Charleston, WV 25303-1137

Phone: (304) 558-3530, Ext. 2710

FAX: (304) 558-2006

out put & go to BL for WV  
FL



Tom Ong  
<tomong@wvdhhr.org>  
11/28/2006 10:00 AM

To Joe Slayton/ESC/R3/USEPA/US@EPA  
cc  
bcc  
Subject WV - WVAW On-site Close-Out

Joe,

The fax is on its way. Attached is the letter that was sent to them closing out the survey. I have also attached the electronic Thermometer Calibration Form that was sent to them. It's kind of neat to see it work.

If you need anything else, please let me know.

Thomas L. Ong, Microbiologist Supervisor  
Chief - Laboratory Certification Officer  
Chief - Laboratory Evaluation Officer  
WVDHHR - BPH  
Office of Laboratory Services  
167 - 11th Avenue  
South Charleston, WV 25303  
Phone: 304-558-3530, Ext. 2710  
email: tomong@wvdhhr.org

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WVAW-Kan 9-06 Final.pdf Thermometer Calibrations\_Blnk\_Rev 1-2006.xls



Greg  
Pond/R3/USEPA/US@EPA  
11/28/2006 10:13 AM

To Joe Slayton/ESC/R3/USEPA/US@EPA  
cc  
bcc  
Subject **Ex. 6 - Personal Privacy**

Bcc:  
Return-Path: Pond.Greg@epa.gov  
Message-ID: <RTTMDBkTXuVjDmCJaaE0000e4d4@rttmdb>  
X-OriginalArrivalTime: 28 Nov 2006 15:13:39.0119 (UTC)  
FILETIME=[C8623BF0:01C712FF]  
Date: 28 Nov 2006 10:13:39 -0500

Slayton.Joe@epa.gov

## **Ex. 6 - Personal Privacy**



Dan Hill  
<danhill@wvdhhr.org>  
08/02/2006 09:14 PM

To George Long/ESC/R3/USEPA/US@EPA  
cc ccather@wvdep.org, MDORSEY@wvdep.org, Larry Duffield  
<larryduffield@wvdhhr.org>, Randy Curtis  
<rcurtis@wvdhhr.org>, Walter Ivey  
bcc

Subject Re: Fw: Certification of Labs for water testing

Mr. Long,

The West Virginia Department of the Environment certifies labs for analysis of surface water. You may contact WV DEP by calling 304-926-0440 or you can find a list of the labs at the WVDEP web site [www.wvdep.org](http://www.wvdep.org) (or see attached). The WV Department of Health Office of Lab Services recognizes out-of-state labs to analyze drinking water for public water systems. A list of NELAP accredited labs for radiochemistry analysis of samples in West Virginia is attached FYI.

Dan

Dan Hill, Chief  
Radiological Health Program  
DHHR Bureau for Public Health, OEHS  
Capitol and Washington Streets  
1 Davis Square, Suite 200  
Charleston, WV 25301-1798  
304-558-6772  
304-558-0524 FAX

[http://www.wvdhhr.org/rtia/radiological\\_health.asp](http://www.wvdhhr.org/rtia/radiological_health.asp)

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"The release of atomic energy has not created a new problem. It has merely made more urgent the necessity of solving an existing one."  
{Albert Einstein}

>>> <Long.George@epamail.epa.gov> \*08/01/06 3:02 PM >>>

----- Forwarded by George Long/ESC/R3/USEPA/US on 08/01/2006 03:01 PM -----

Larry Duffield  
<larryduffield@wvdhhr.org>

To:

George Long/ESC/R3/USEPA/US@EPA

George,

We currently have 4 labs certified in-state for chemistry, and 15 labs out-of-state for chemistry.

For RAD information, you need to talk to Dan Hill. He is the Chief of the Radiological Health Program.

His email address: danhill@wvdhhr.org , phone # 304-558-6772

Larry A. Duffield  
Program Manager I  
Chief Certification Officer, Chemistry  
WVDHHR-Office of Laboratory Services  
Environmental Chemistry Section  
4710 Chimney Drive, Suite G  
Charleston, WV 25302  
Phone: (304) 965-2694 X 2222  
FAX: (304) 965-2696  
E-Mail: larryduffield@wvdhhr.org

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>>> <Long.George@epamail.epa.gov> 8/1/2006 10:26:28 AM >>>

Dear Reg. 3 Lab Directors and COs:

In order to comply with a recent program review questionnaire from the Office of Ground Water and Drinking Water, we are asking you if you (the state labs) certify micro labs for surface water ( ie. enumeration )? If not do you have any plans for implementation of this type of certification?

Likewise, we ask that you send us the number of drinking water labs that you certify (in state/out of state ) for each of the separate areas of Chemistry, Micro, and RAD. We are forced to ask you for a very timely reply , by Aug. 7.

Thank You

George Long



10539\_Commercial labs Official list as of 4\_30\_06.pdf



10541\_Industrial labs Official list as of 4\_30\_06.pdf



10543\_Municipal labs Official list as of 4\_30\_06.pdf LIST OF NELAP LABS.doc



Larry Duffield  
<larryduffield@wvdhhr.org>  
08/01/2006 11:04 AM

To George Long/ESC/R3/USEPA/US@EPA  
cc Andrea Labik <andrealabik@wvdhhr.org>, Charlotte  
Billingsley <charlottebillingsley@wvdhhr.org>, Dan Hill  
<danhill@wvdhhr.org>, Tom Ong <tomong@wvdhhr.org>  
bcc

Subject Re: Certification of Micro Labs for surface water

History: This message has been forwarded.

George,

We currently have 4 labs certified in-state for chemistry, and 15 labs out-of-state for chemistry.

For RAD information, you need to talk to Dan Hill. He is the Chief of the Radiological Health Program.  
His email address: danhill@wvdhhr.org , phone # 304-558-6772

Larry A. Duffield  
Program Manager I  
Chief Certification Officer, Chemistry  
WVDHHR-Office of Laboratory Services  
Environmental Chemistry Section  
4710 Chimney Drive, Suite G  
Charleston, WV 25302  
Phone: (304) 965-2694 X 2222  
FAX: (304) 965-2696  
E-Mail: larryduffield@wvdhhr.org

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Thank You

George Long

Joe  
Slayton/ESC/R3/USEPA/US  
07/30/2006 01:24 PM

To Tom Ong <tomong@wvdhhr.org>  
cc Charlotte Billingsley <charlottebillingsley@wvdhhr.org>, Mike  
Flesher <mikeflesher@wvdhhr.org>, Tracy Goodson  
<tracygoodson@wvdhhr.org>, George  
bcc  
Subject Re: Joint Audit With EPA Reg 3 

Thanks.  
Tom Ong <tomong@wvdhhr.org>



Tom Ong  
<tomong@wvdhhr.org>  
07/28/2006 09:56 AM

To Joe Slayton/ESC/R3/USEPA/US@EPA  
cc Charlotte Billingsley <charlottebillingsley@wvdhhr.org>, Mike  
Flesher <mikeflesher@wvdhhr.org>, Tracy Goodson  
<tracygoodson@wvdhhr.org>  
Subject Joint Audit With EPA Reg 3

Joe,

I have scheduled an audit at a WVAW Kanawha Valley Treatment Plant's  
Micro Lab (Colilert Only) for Thursday, Sept. 21. The lab is in  
downtown Charleston and only about 10 minutes from our lab.

Thomas L. Ong, Microbiologist Supervisor  
Chief - Laboratory Certification Officer  
Chief - Laboratory Evaluation Officer  
WVDHHR - BPH  
Office of Laboratory Services  
167 - 11th Avenue  
South Charleston, WV 25303  
Phone: 304-558-3530, Ext. 2710  
email: tomong@wvdhhr.org

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Larry Duffield  
<larryduffield@wvdhhr.org>  
07/27/2006 07:52 AM

To Joe Slayton/ESC/R3/USEPA/US@EPA  
cc George Long/ESC/R3/USEPA/US@EPA  
bcc

Subject Fwd: Re: WV Health Laboratory SDWA On-site and WV  
SDWALabCertificationProgram Review

Joe,  
I passed your question over to the program office, this is as much of an answer as we have gotten so far. Walt Ivey is the manager over the Environmental Engineering Division and Charlie Robinette passed the issue up to him. As far as I can tell, Walt has not opened the e-mails yet and may be out of town. I asked to be copied to any of their responses. I will keep you informed.

Larry A. Duffield  
Program Manager I  
Chief Certification Officer, Chemistry  
WVDHHR-Office of Laboratory Services  
Environmental Chemistry Section  
4710 Chimney Drive, Suite G  
Charleston, WV 25302  
Phone: (304) 965-2694 X 2222  
FAX: (304) 965-2696  
E-Mail: larryduffield@wvdhhr.org

*Handwritten:*  
Daw Hill  
Office of Envir Science  
304-558-6772

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>>> Charles Robinette 7/24/2006 10:04:42 AM >>>

Walt:

We have discussed this issue previously. As I recall the discussion, the only time we ever take organic samples has been in conjunction with a spill of some sort, and we typically rely on WVDEP or USEPA, as it is prior to treatment, not after treatment (compliance sampling location per SDWA requirements).

Since you are out today, and I will be out the remainder of the week, I suspect you will need to respond. Was not sure if I should respond or not.

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>>> Larry Duffield 7/21/2006 8:01:44 AM >>>  
Charlie,

I think you or Walt should answer this question. I think the answer is no, but I'm not sure. We haven't discussed this issue for several months. I think basically Joe wants to know if the Engineers ever take samples for compliance monitoring and to what lab you take them. This issue gets back to the requirements for retainment of primacy, that is, the "Principle State Laboratory" must be able to provide all necessary testing, organic and inorganic, that is listed in the certification manual. And if you will recall, that's why your office was working on a "Memorandum of Understanding" with Virginia's lab. After I told you last year that we were going to try to share equipment with the Chemical Terrorism (CT) section down the hall here to get certified for organics, I think the VA MOU was put on hold. Well, since we talked, the "partnership" with CT has been put on indefinite hold, because we were not going to be allowed any control of the equipment, and other issues.

We are being audited on-site in September and they are wanting lots of Presurvey information.

Anyway, I would appreciate it if you would give Mr. Slayton an answer on this, and copy to me. Thanks.

Larry A. Duffield  
Program Manager I  
Chief Certification Officer, Chemistry  
WVDHHR-Office of Laboratory Services  
Environmental Chemistry Section  
4710 Chimney Drive, Suite G  
Charleston, WV 25302  
Phone: (304) 965-2694 X 2222  
FAX: (304) 965-2696  
E-Mail: larryduffield@wvdhhr.org

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>>> <Slayton.Joe@epamail.epa.gov> 7/20/2006 2:42:39 PM >>>  
Thanks. I think the labs certified by WV to perform SDWA analyses for PWS will be covered in our review of WV's SDWA Lab Cert Program.

What about labs the WV State SDWA program uses instead of WV's Health Lab to analyses samples they take, e.g., does the program office ever take samples for Organic SDWA targets and if so where do they send them

since the WV Health Lab does not have that capability and are those lab/s SDWA certified? If you are not sure of the answer to this questions could you please forward to the WV SDWA program office.

Larry Duffield  
<larryduffield@  
wvdhhr.org>

To

George Long/ESC/R3/USEPA/US@EPA

07/20/2006

cc

12:38 PM

Joe Slayton/ESC/R3/USEPA/US@EPA

Subject

Re: WV Health Laboratory SDWA

On-site and WV SDWA

LabCertificationProgram Review

I have a question about one of your requests on the PreSurvey form. Under Section V. you request us to: "Provide a listing of all laboratories the state laboratory utilizes for compliance analyses and copies of current SDWA certificates for these laboratories that includes the corresponding methods and analytes." Our laboratory does not use or subcontract out to other labs. Our Certification Program, however, certifies many labs in and out of state for compliance monitoring of state PWS. This would be data that we never see, it goes directly to the Data Management section of the Office of Environmental Health Services. So, do you want information on the labs we certify (several), or info on labs we use directly (none)?

Larry A. Duffield  
Program Manager I  
Chief Certification Officer, Chemistry  
WVDHHR-Office of Laboratory Services  
Environmental Chemistry Section

4710 Chimney Drive, Suite G  
Charleston, WV 25302  
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**\*ACCREDITED RADIOCHEMISTRY LABS AUTHORIZED BY THE DHHR BUREAU  
FOR PUBLIC HEALTH, OFFICE OF ENVIRONMENTAL HEALTH SERVICES**

**Revised: June 23, 2006**

Ex. 6 - Personal Privacy **Laboratory Director**

**KNL Laboratory Services  
2742 North Florida Avenue  
P.O. Box 1833  
Tampa, FL 33601  
Florida lab I.D. E84025, exp. 6/30/06**

Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

**Quality Assurance Officer  
Underwriter Laboratories, Inc.  
110 S. Hill Street  
South Bend, IN 46617  
WV lab ID 9927(C) & Florida lab ID E87775, exp. 6/30/07**

Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

**Quality Assurance Manager  
Benchmark Analytics  
4777 Saucon Creek Road  
Center Valley, PA 18034-9004  
PA DEP lab ID 39-00401, exp. 1/31/07**

Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

**Quality Assurance Manager  
Pace Analytical Services, Inc.  
P. O. Box 158, M/S 62  
Madison, PA 15663  
WV DEP lab ID 314, PA DEP lab ID 65-02103, exp. 7/31/06**

Ex. 6 - Personal Privacy

one "R"

## WEST VIRGINIA CERTIFIED COMMERCIAL LABORATORIES

April 30, 2006

I = Inorganic Chemistry

O = Organic Chemistry

M = Metals

B = Microbiology

A = Aquatic Toxicity

C = Characteristics

R = Radiochemistry

No.	Facility Name	Certified Category	Cert. Expires
313	Ex. 6 - Personal Privacy President A & L EASTERN AGRICULTURAL LABORATORIES, INC. 7621 Whitepine Road Richmond, VA 23237-2296 (804) 743-9401	IM	11/30/06
010	Ex. 6 - Personal Privacy Laboratory Manager AC & S LABORATORIES P.O. Box 335 Nitro, WV 25143 (304) 755-0536	IOMBAC	4/30/07
062	Ex. 6 - Personal Privacy President ACCULAB, INC P.O. Box 367 Mt. Gay, WV 25637 (304) 752-6798	IMB	9/30/06
329	Ex. 6 - Personal Privacy Corporate QA Director ACCUTEST LABORATORIES-New Jersey Building B, 2235 Route 130 Dayton, NJ 08810 (732) 329-0200	IOMC	7/31/06
351	Ex. 6 - Personal Privacy Quality Assurance Manager ADVENT-ENVIRON 201 Summit View Drive Suite 300 Brentwood, TN 37027 (615) 377-4775 Ext. 168	A	1/31/07
350	Ex. 6 - Personal Privacy President AIR, WATER, & SOIL LABORATORIES, INC. 2109 A North Hamilton Street Richmond, VA 23230 (866) 358-8318	IOMC	11/30/06



245	<div>Ex. 6 - Personal Privacy</div> <div>QA/QC Manager</div> <b>AMERICAN TESTING COMPANY, INC.</b> 5475 Perkins Rd. Bedford Heights, OH 44146 (440) 786-1403	IOMC	12/31/06
042	<div>Ex. 6 - Personal Privacy</div> <div>Laboratory Manager</div> <b>ANALABS, INCORPORATED</b> P.O. Box 1235 Crab Orchard, WV 25827 (800) 880-6406	IOMB	8/31/06
343	<div>Ex. 6 - Personal Privacy</div> <div>Laboratory Manager</div> <b>ANALYTICAL LABORATORY SERVICES, INC.</b> 34 Dogwood Lane Middletown, PA 17057 (800) 794-7709	OM	7/31/06
075	<div>Ex. 6 - Personal Privacy</div> <div>Laboratory Manager</div> <b>APPALACHIAN LAB. INC.</b> P.O. Box 392 Beckley, WV 25802 (304) 253-8677	IMB	8/31/06
295	<div>Ex. 6 - Personal Privacy</div> <div>President</div> <b>APPALACHIAN STATES ANALYTICAL, LLC</b> P.O. Box 520 Shelbianna, KY 41562 (888) 381-8942	IMBC	1/31/07
197	<div>Ex. 6 - Personal Privacy</div> <div>Quality Assurance Manager</div> <b>AQUA TECH ENVIRONMENTAL LAB - MELMORE</b> P.O. Box 76 Melmore, OH 44845 (800) 858-8869	A	9/30/06
036	<div>Ex. 6 - Personal Privacy</div> <div>President</div> <b>BARBOURSVILLE TESTING LABORATORY, INC.</b> P.O. Box 43 Barboursville, WV 25504 (304) 525-3971	IB	9/30/06
309	<div>Ex. 6 - Personal Privacy</div> <div>Quality Assurance Director</div> <b>BIO-CHEM ENVIRONMENTAL ANALYTICAL LABORATORIES, INC.</b> 1049 28 <sup>th</sup> Street, South East Grand Rapids, MI 49508 (800) 362-5227	IOM	8/31/06

220	Ex. 6 - Personal Privacy President BIO-CHEM TESTING, INC P.O. Box 634 Teays, WV 25569 (304) 757-8954	IMB	7/31/06
228	Ex. 6 - Personal Privacy Executive Director CACAPON INSTITUTE Rt. 1 Box 326 High View, WV 26808-9708 (304) 856-1385	IB	7/31/06
077	Ex. 6 - Personal Privacy President CENTRAL TESTING LAB P.O. Box 481 Route 19 N. Summersville, WV 26651 (304) 872-6974	IMB	8/30/06
292	Ex. 6 - Personal Privacy Laboratory Manager COLUMBIA ANALYTICAL SERVICES 1 Mustard St. Suite 250 Rochester, NY 14609 (800) 695-7222	IOMC	1/31/07
347	Ex. 6 - Personal Privacy COLUMBIA ANALYTICAL SERVICES, INC. 10655 Richmond Avenue, Suite 130A Houston, TX 77042 (800) 695-7222 Ext. 05	O	4/30/07
221	Ex. 6 - Personal Privacy Laboratory Supervisor COMPLIANCE MONITORING LABORATORIES, INC. 50 Caney Branch Road Chapmanville, WV 25508 (304) 855-0140	IMB	9/30/06
342	Ex. 6 - Personal Privacy CTL ENGINEERING, INC P.O. Box 44548 Columbus, OH 43204 (614) 276-8123	OMC	10/31/06
035	Ex. 6 - Personal Privacy Laboratory Manager ENGINEERING & TESTING 2000, INC P.O. Box 1149 Lewisburg, WV 24901 (304) 645-4056	B	12/31/06

327	Ex. 6 - Personal Privacy	O	12/31/06
	<b>QA Manager</b> <b>ENO RIVER LABS, LLC</b> <b>2445 South Alston Avenue</b> <b>Durham, NC 27713-1301</b> <b>(919) 281-4005</b>		
098	Ex. 6 - Personal Privacy	IOMB	11/30/06
	<b>ENVIROCOMPLIANCE LABORATORY, INC.</b> <b>P.O. Box 919</b> <b>Verona, VA 24482</b> <b>(540) 248-1311</b>		
105	Ex. 6 - Personal Privacy	IOM	12/31/06
	<b>ENVIRONMENTAL MONITORING, INC</b> <b>P.O. Box 1190</b> <b>Norton, VA 24273</b> <b>(888) 236-4522</b>		
233	Ex. 6 - Personal Privacy	IOMC	2/28/07
	<b>Director of Regulatory Affairs</b> <b>ENVIRONMENTAL SCIENCE CORP</b> <b>12065 Lebanon Road</b> <b>Mt. Juliet, TN 37122</b> <b>(800) 767-5859</b>		
209	Ex. 6 - Personal Privacy	IA	12/31/06
	<b>Manager</b> <b>ENVIROSCIENCE, INC.</b> <b>3781 Darrow Road</b> <b>Stow, OH 44224-4035</b> <b>(800) 940-4025</b>		
234	Ex. 6 - Personal Privacy	O	10/31/06
	<b>Vice President, Operations</b> <b>EXYGEN RESEARCH</b> <b>3058 Research Drive</b> <b>State College, PA 16801</b> <b>(800) 281-3219</b>		
116	Ex. 6 - Personal Privacy	IM	11/30/06
	<b>G &amp; C COAL ANALYSIS LABORATORY</b> <b>1341 Hoffman Hollow Road</b> <b>Summerville, PA 15864</b> <b>(814) 849-7301</b>		
141	Ex. 6 - Personal Privacy	IOMC	10/31/06
	<b>Quality Assurance Coordinator</b> <b>GEOCHEMICAL TESTING LABS</b> <b>A Division of Energy Center</b> <b>2005 North Center Ave.</b> <b>Somerset, PA 15501</b> <b>(814) 443-1671</b>		

326	Ex. 6 - Personal Privacy	IB	10/31/06
	Laboratory Manager GREENSCAPE ANALYTICAL LABORATORIES, INC. Route 4 Box 101 Ravenswood, WV 26164 (304) 273-1050		
273	C Ex. 6 - Personal Privacy C	IOMC	10/31/06
	HERITAGE ENVIRONMENTAL SERVICES, LLC 7901 West Morris Street Indianapolis, IN 46231 (317) 390-3182		
123	Ex. 6 - Personal Privacy	IMB	10/31/06
	President H & H WATER CONTROLS, INC. P.O. Box 396 Carmichaels, PA 15320-1053 (412) 966-2278		
038	Ex. 6 - Personal Privacy	IB	8/31/06
	Analyst HYDROCHEM LABORATORIES, INC. P.O. Box 400 Shenandoah Junction, WV 25442 (304) 725-6174		
186	Ex. 6 - Personal Privacy	IMB	9/30/06
	QA/QC Officer INDUSTRIAL LAB ANALYSIS 2240 Williamsburg Farm Glen Dale, WV 26038 (304) 233-5595		
037	Ex. 6 - Personal Privacy	IOMBCT	6/30/06
	QA Officer KEMRON ENVIRONMENTAL SERVICES 156 Starlite Park Marietta, OH 45750 (740) 373-4071		
055	Ex. 6 - Personal Privacy	IOMC	7/31/06
	QA Specialist LANCASTER LABORATORIES, INC. 2425 New Holland Pike Lancaster, PA 17605-2425 (717) 656-2308		
348	Ex. 6 - Personal Privacy	M	12/31/06
	Laboratory Manager MERCURY ONE, LIMITED 2241 Pinnacle Parkway Twinsburg, OH 44087 (330) 963-0843		

215	Ex. 6 - Personal Privacy MICROBAC LABORATORIES - Pittsburgh 100 Marshall Drive Warrendale, PA 15086-7544 (412) 772-0610	IOMC	1/31/07
251	Ex. 6 - Personal Privacy MICROSEEPS, INC 220 William Pitt Way Pittsburgh, PA 15238 (412) 826-5245	IOM	1/31/07
103	Ex. 6 - Personal Privacy <del>Laboratory manager</del> MINERAL LABORATORIES P.O. Box 549 Salyersville, KY 41465 (606) 349-6145	IMB	1/31/07
225	Ex. 6 - Personal Privacy <del>Laboratory manager</del> MOUNTAIN RESEARCH, LLC 825 25 <sup>th</sup> Street Altoona, PA 16601 (800) 837-4674	OMC	10/31/06
182	Ex. 6 - Personal Privacy <del>Laboratory Director</del> NRCCE LABORATORIES OF WVU P.O. Box 6064 Morgantown, WV 26506-6064 (304) 293-2867 ext. 5472	IMBC	2/28/07
168	Ex. 6 - Personal Privacy <del>Laboratory manager</del> NATURAL EARTH SCIENCE TESTING (N.E.S.T.) Rt. 2 Box 88C Belington, WV 26250 (304) 457-4749	IMB	4/30/07
253	Ex. 6 - Personal Privacy Laboratory Manager NUTRIENT MGMT & WATER QUALITY LAB (WVDA) 60B Industrial Park Road Moorefield, WV 26836 (304) 538-2397	I	7/31/06
085	Ex. 6 - Personal Privacy Laboratory Manager OLVER INCORPORATED 1116 South Main Street, Suite 100 Blacksburg, VA 24060 (540) 552-5548	A	7/31/06

330	Ex. 6 - Personal Privacy <del>Person</del> PACE ANALYTICAL SERVICES 7726 Moller Road Indianapolis, IN 46268 (317) 875-5894	OMC	10/31/06
143	Ex. 6 - Personal Privacy <del>Quality Assurance Manager</del> PACE ANALYTICAL 5203 Triangle Lane Export, PA 15632 (724) 733-1161	IOMC	1/31/07
314	Ex. 6 - Personal Privacy QA/QC Manager PACE ANALYTICAL P.O. Box 158, M/S 62 Madison, PA 15663 (724) 722-5214	R	1/31/07
293	Ex. 6 - Personal Privacy <del>Laboratory Director</del> PARADIGM ANALYTICAL LABORATORIES 5500 Business Drive Wilmington, NC 28405 (910) 350-1903	OMC	12/31/06
303	Ex. 6 - Personal Privacy QA Officer PHASE SEPARATION SCIENCE, INC. 6630 Baltimore National Pike Baltimore, MD 21228 (410) 747-8770	OM	8/31/06
340	Ex. 6 - Personal Privacy <del>Quality Assurance Manager</del> PROCHEM ANALYTICAL, INC 1401 Municipal Road, NE Roanoke, VA 24012 (540) 265-7211	IOMC	7/31/06
060	Ex. 6 - Personal Privacy <del>President</del> REI CONSULTANTS, INC. P.O. Box 286 Beaver, WV 25813 (800) 999-0105	IOMBAC	9/30/06
158	Ex. 6 - Personal Privacy <del>President</del> RELIANCE LABORATORIES - Bridgeport P.O. Box 4657 Benedum Industrial Park Bridgeport, WV 26330-4657 (304) 842-5285	IOMBC	4/30/07

181	Ex. 6 - Personal Privacy President RELIANCE LABORATORIES - Martinsburg 25 Crimson Circle Martinsburg, WV 25401 (304) 596-2084	IB	8/31/06
020	Ex. 6 - Personal Privacy QA/QC Officer SGS/CT & E ENVIRONMENTAL SERVICES - CHARLESTON 1256 Greenbrier Street Charleston, WV 25311 (304) 346-0725	IOMBAC	5/31/06
044	Ex. 6 - Personal Privacy Laboratory Supervisor SGS NORTH AMERICA, INC., MINERAL SERVICES DIVISION-SOPHIA P.O. Box 850 Sophia, WV 25921 (304) 255-0422	IM	8/31/06
252	Ex. 6 - Personal Privacy QA/QC STL Buffalo 10 Hazelwood Dr., Suite 106 Amherst, NY 14228 (716) 691-2600	IOM	1/31/07
345	Ex. 6 - Personal Privacy QA/QC Manager STL Knoxville 5815 Middlebrook Pike Knoxville, TN 37921 (865) 291-3000	O	1/31/07
210	Ex. 6 - Personal Privacy <del>QA/QC Manager</del> STL North Canton 4101 Shuffel Drive North Canton, OH 44720 (330) 966-8284	IOMC	12/31/06
136	Ex. 6 - Personal Privacy QA Coordinator STL Pensacola 3355 McLemore Drive Pensacola, FL 32514 (850) 474-1001	IOMC	4/30/07
142	Ex. 6 - Personal Privacy <del>QA/QC Manager</del> Technical Director STL Pittsburgh 301 Alpha Drive Pittsburgh, PA 15238 (412) 963-7058	IOM	1/31/07

334	Ex. 6 - Personal Privacy <del>Quarry Assurance Manager</del> STL Sacramento 880 Riverside Parkway West Sacramento, CA 95605 (916) 373-5600	O	7/31/06
094	Ex. 6 - Personal Privacy <del>Quarry Assurance Manager</del> STL Savannah 5102 LaRoche Avenue Savannah, GA 31404 (912) 354-7858	IOMC	4/30/07
257	Ex. 6 - Personal Privacy <del>Quarry Assurance Coordinator</del> SOUTHERN PETROLEUM LABORATORY, INC. 500 Ambassador Caffery Parkway Scott, LA 70583 (337) 237-4775	IOMC	4/30/07
301	Ex. 6 - Personal Privacy SOUTHERN PETROLEUM LABORATORY, INC. 459 Hughes Drive Traverse City, MI 49686 (231) 947-5777	IOM	8/31/06
320	Ex. 6 - Personal Privacy SOUTHERN PERROLEUM LABORATORY, INC. P.O. Box 20807 Houston, TX 77225 (713) 660-0901	IOMC	4/30/07
193	Ex. 6 - Personal Privacy SPECTRUM ENVIRONMENTAL LABORATORIES, INC. P.O. Box 1578 Coeburn, VA 24230-1578 (276) 679-7066	IM	12/31/06
333	Ex. 6 - Personal Privacy Illinois Division Manager STANDARD LABORATORIES, INC. 8451 River King Drive Freeburg, IL 62243 (618) 539-5836	M	10/31/06
006	Ex. 6 - Personal Privacy Supervisor STANDARD LABORATORIES 147 11 <sup>th</sup> Avenue South Charleston, WV 25303 (304) 744-5472	IMB	5/31/07



337	<div>Ex. 6 - Personal Privacy</div> <div>Quality Manager</div> <p>STARK ENVIROLABS, INC. 1718 6<sup>th</sup> Street SW Canton, OH 44706 (800) 673-0060</p>	IOMC	12/31/06
157	<div>Ex. 6 - Personal Privacy</div> <div>Laboratory Director</div> <p>STURM ENVIRONMENTAL SERVICES P.O. Box 650 Bridgeport, WV 26330 (800) 296-6549</p>	IOMBA	5/31/06
248	<div>Ex. 6 - Personal Privacy</div> <div>Laboratory Manager</div> <p>SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC 595 East Tallmadge Ave. Akron, OH 44310 (330) 253-8211</p>	OMC	12/31/06
122	<div>Ex. 6 - Personal Privacy</div> <div>President</div> <p>SUMMIT TECHNICAL LABORATORIES P.O. Box 147 Meyersdale, PA 15552 (814) 634-0485</p>	IMB	10/31/06
219	<div>Ex. 6 - Personal Privacy</div> <div>QA Manager</div> <p>TEST AMERICA ANALYTICAL TESTING CORPORATION P.O. Box 40566 Nashville, TN 37204-0566 (800) 765-0980</p>	IOMC	2/28/07
129	<div>Ex. 6 - Personal Privacy</div> <div>Vice President</div> <p>TRA-DET, INC. P.O. Box 2019 Wheeling, WV 26003 (304) 547-9094</p>	IMB	9/30/06
316	<div>Ex. 6 - Personal Privacy</div> <p>TRIAD-BLACK ROCK TEST LAB 5 Eastgate Plaza Morgantown, WV 26508 (304) 296-8349</p>	IMBC	2/28/07
041	<div>Ex. 6 - Personal Privacy</div> <p>WATER ENVIRONMENTAL TESTING Rt. 1 Box 35-B Mineral Wells, WV 26150 (304) 489-1060</p>	IB	6/30/06

WV LAB CERT PROGRAM  
GENERAL



Tom Ong  
<tomong@wvdhhr.org>  
04/04/2006 01:46 PM

To Joe Slayton/ESC/R3/USEPA/US@EPA, Alan Marchun  
<amarchun@wvdhhr.org>, Andrea Labik  
<andrealabik@wvdhhr.org>, Barb Taylor

cc

bcc

Subject 2006 Certified Drinking Water Lab List

Attached is the updated 2006 Certified Drinking Water Lab List.

Thomas L. Ong, Microbiologist Supervisor  
Laboratory Certification Officer  
Laboratory Evaluation Officer  
WVDHHR - BPH  
Office of Laboratory Services  
167 - 11th Avenue  
South Charleston, WV 25303  
Phone: 304-558-3530, Ext. 2710  
email: tomong@wvdhhr.org


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WQL\_4-4-2006.pdf

*elect. filed where?*

*inspect as  
put into Den'l file*

 George  
Long/ESC/R3/USEPA/US  
04/04/2006 03:01 PM

To Maryann.Lustfield@state.de.us, Amir.Saad@state.de.us,  
Edward.Hallock@state.de.us, Brenda.Haire@state.de.us,  
Christina.pleasanton@state.de.us,  
cc Joe Slayton/ESC/R3/USEPA/US@EPA

bcc

Subject method- specific check lists

Dear Reg 3 Certification Officers:

We are updating our Drinking Water Test Methods check lists. Several of ours are old and probably out-dated.

Could you email to us any of your current check lists ? We would ask that you do this by COB Friday

Thank You

George Long

Blue - Big Chunks

DCN: R3-QA810.0 Effective Date: November 10, 2005

#### 11.4 Attachment #4 Example Checklist for the On-site Assessment of R3 State Laboratory Certification Programs.

##### Evaluation of State Laboratory Certification Programs:

From: Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and Procedures, Quality Assurance, EPA 815-B-97-001 United States Office of Ground Water and Drinking Water Environmental Protection Agency, Cincinnati, OH 45268, March 1997

##### EPA Regions:

\* The Regions oversee the certification programs in the States. The Regions' responsibilities are:

- Perform an annual review of State certification programs and performance evaluation results and monitor the adequacy of State programs for certifying laboratories, as described in Chapter III [*R3 uses annual questionnaires. Does on-site review every three years*];

\* "...this manual (Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and Procedures, Quality Assurance) must be the basis for the on-site audits, conducted by EPA, of principal State laboratories, laboratories on Federal Indian lands, and drinking water laboratories in non-primacy States."

##### Primacy States

\* Primacy States are required to establish and maintain a State program for the certification of laboratories conducting analyses of drinking water compliance samples, unless all compliance samples are analyzed in the State laboratory.

\* The States must designate a certification officer or officers, certified by the EPA administrator or his or her designee as the person responsible for the certification program.

- \* States are responsible for the certification of the public and private laboratories in their State.

Page 1 of 5

- \* This includes auditing the laboratories and reviewing the PE data.
- \* States should also provide technical assistance to laboratories.
- \* They may also choose to certify laboratories outside their State either by an on-site evaluation or reciprocity.

### Chapter III Implementation

#### Evaluation of Certification Programs:

- \* The Regions and OGWDW should monitor the certification programs under their purview annually. *R3 uses annual questionnaires. Does on-site review every three years.*
- \* The adequacy of programs for certifying laboratories is evaluated by assessing each program's:
  - \* scope;
  - \* staffing;
  - \* resources;
  - \* policy;
  - \* procedures; and

- \* effectiveness.

This should be determined in person during an on-site audit when possible and at least by means of a questionnaire in the other years.

Page 2 of 5

- \* The adequacy of these essential program elements is evaluated by:

- \* Reviewing the program's plan;

- \* responsibilities;

- \* organizational structure;

- \* staff (including educational background and experience);

- \* scope and description of the certification process, downgrading criteria and processes;

- \* and use of PE samples;

- \* Requesting an annual program report that includes program highlights, training, continuing education efforts, number of on-site evaluations performed, listing of laboratories certified by discipline or contaminant, and any certification downgrading or upgrading actions along with reasons for those actions ***Region 3 has this as part of the Regional Questionnaire;***

- \* Observing on-site audits of drinking water laboratories to allow EPA Regional certification officers to evaluate specific elements of the State certification program;

- \* Encouraging State and Regional laboratory auditors to observe on-site audits of their own and other laboratories as on-the-job training; ***Region 3 has this as part of the On-site of State Laboratories***

Page 3 of 5

- \* Sponsoring annual meetings of certification officers to discuss program issues, policies, and problems. Key Regional, NERL, and OGWDW and State personnel should be invited to participate.

**Additional Items (Region 3):**

- \* Example inspection reports.
- \* Training of Cos/records (do they get on-the-job training, NELAC says min. of four). DO COs GET SAFETY TRAINING (REQUIRED OF EPA ASSESSORS)?
- \* Filing system for reports/tracking of corrective actions, etc.
- \* System for tracking of PT performance.
- \* Use of PTs and PT requirements (method and analyte)
- \* PT schedule (Lab's option or set by State)?
- \* Outreach/training provided to regulated community
- \* Written procedures/policies or program description.

Black - micro  
Blue - Big chemistry

\* "Data Audit" of files including examples of certificates and correspondences—especially reports/time lines and corrective actions.

\* What is the emphasis of the State's on-site review (encourage review of data a part of on-site assessments).

Page 4 of 5

\* Time State spends on site and number of auditors?

\* Do they have the resources to do the job?

\* Encourage the use of method specific analytical checklists (microbiology checklists is required).

\* Lab Ids? *#* *C* *chemistry* *M* *micro*

\* Certification groups?

\* Inspection schedule:

Are they able to get on-site every three years?

How long for reports to be sent to the lab? *45 days*

Do they have a projected schedule for on-sites? *see red dot*

\* Does State require a minimum number of samples to be analyzed by SDWA protocols for a lab to be in their program (assures lab is practices/experienced and that there is data to review)?

\* Is Certification by method and Analyte? *NO*

\* Do they have a good pre-survey package? *YES*

*NO* *check list, lab info*

\* Pick 3-4 lab files at random and check:

Final Reports;

PT results;

Corrective Action Reports;



DCN: R3-QA810.0 Effective Date: November 10, 2005

Certificates.

Page 5 of 5



# West Virginia

Department of Health and Human Resources

Bureau for Public Health

Office of Laboratory Services

Environmental Chemistry Laboratory

4710 CHIMNEY DRIVE, SUITE G

CHARLESTON, WEST VIRGINIA 25302

Phone: (304)965-2694 Fax: (304)965-2696

## CHEMISTRY PROFICIENCY TESTING WATER STUDY ENROLLMENT FORM

Laboratory Name: _____	Assigned W.V. Laboratory I.D. #: _____
Address: _____	
City/State/Zip: _____	Date Faxed: _____

PTWS Provider Name: _____	Open Date: _____
Study Number: _____	Closing Date: _____

Before the Certifying Authority accepts any PTWS results this form must be faxed to (304)965-2696 prior to the closing date of the enrolled study.

### -----Office Use Only-----

DATE PTWS RECEIVED	Database updated	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Corrective Action Report needed	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Make-up PTWS	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Additional action needed	<input type="checkbox"/> Yes <input type="checkbox"/> No



# West Virginia

**Department of Health and Human Resources  
Bureau for Public Health  
Office of Laboratory Services  
Environmental Chemistry Laboratory**

**4710 CHIMNEY DRIVE, SUITE G  
CHARLESTON, WEST VIRGINIA 25302  
Phone: (304)965-2694 Fax: (304)965-2696**

**Joe Manchin III  
Governor**

**Martha Yeager Walker  
Secretary**

## **DRINKING WATER LABORATORY CERTIFICATION PROGRAM**

To: All Chemistry Laboratories Certified for Drinking Water  
From: West Virginia Chemistry Laboratory Certification Program  
Re: Proficiency Testing Requirements

### **PLEASE NOTE THE FOLLOWING INFORMATION CONCERNING PROFICIENCY STUDIES**

The West Virginia Drinking Water Certification Program has initiated a Proficiency Testing Water Study (PTWS) reporting requirement that all Laboratories certified to perform drinking water testing for the purpose of compliance reporting must adhere to.

A periodic review of each laboratory's certification folder is conducted throughout the year and notifications are mailed based upon these examinations. Most of the notifications consist of needed Corrective Action Reports for unacceptable results or to remind the laboratory that the Certifying Authority must receive an acceptable PTWS result by September 30<sup>th</sup> of each year. Every year we have a situation where a laboratory had enrolled in a PTWS, which we did not receive, and at the end of the year this affected the laboratory's certification.

To resolve this situation, all laboratories are now required to submit a PTWS Enrollment Notification Form, effective May 1, 2006. Before the Certifying Authority will accept any PTWS results, the above form must be completed and submitted by FAX before the closing date of the enrolled PTWS. If the laboratory has already completed or is currently enrolled in a PTWS you are required to notify the Certifying Authority by May 1, 2006 to ensure the results will be accepted.

As a reminder, to maintain certification, all laboratories must provide an acceptable proficiency water study result for each certified parameter you currently hold by September 30, of each year. The proficiency testing results must be sent from the provider to the West Virginia Certification Program; no photocopies from the laboratory will be accepted.

Cordially,

**Larry A. Duffield  
Chief Chemistry Certification Officer**

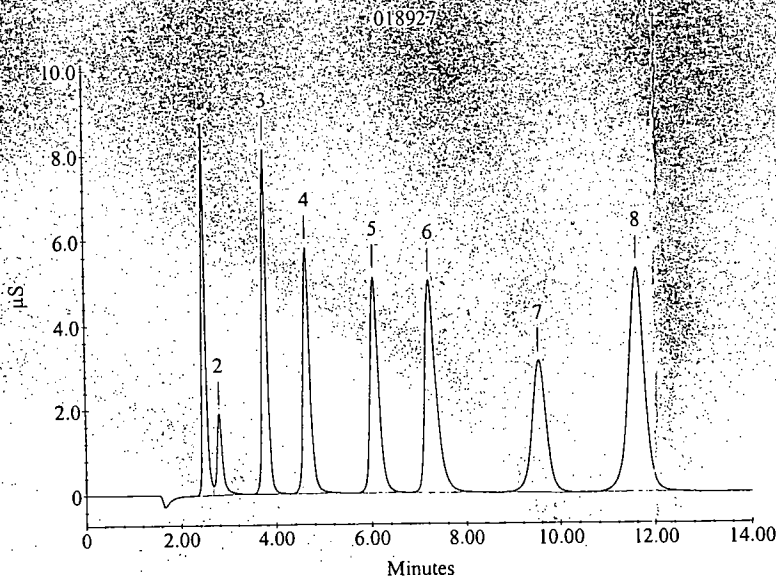
ENCLOSURE: Proficiency Testing Water Study Enrollment Form

**IonPac® AS14**  
**Analytical (4 x 250 mm)**  
**Product No. 046124**

Serial No. : 018927

Pressure (PSI) : 1150

Date : 2/7/2005 9:56:54 AM



**Eluent:** 3.5 mM Na<sub>2</sub>CO<sub>3</sub>/1.0 mM NaHCO<sub>3</sub>  
**Flow Rate:** 1.2 mL/min  
**Detection:** Suppressed Conductivity at 10 µSFS  
**ASRS®-ULTRA**  
AutoSuppression® Recycle Mode

**Injection Volume:** 10 µL

**Storage Solution:** Eluent

Peak Information : Found Components

Peak No.	Retention Time	Name	Efficiency	Asymmetry (10%)	Resolution
				<i>See "peak tailing"</i>	
1	2.48	Fluoride	5.0	4379	2.0
2	2.80	Acetate	20.0	3483	n/a
3	3.78	Chloride	10.0	6757	1.1
4	4.65	Nitrite	15.0	5831	1.3
5	6.07	Bromide	25.0	6066	1.5
6	7.22	Nitrate	25.0	5009	2.2
7	9.53	Phosphate	40.0	4767	1.2
8	11.58	Sulfate	30.0	5736	1.1
					n/a

File Name : E:\PEAKNET\DATA\AS14\AS14 4MM\_AE004.DXD

## **Drinking Water Certification Program - Microbiology**

### **I. Introduction -**

The State of West Virginia is designated a Primacy State, having primary enforcement of the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulations (NPDWR). Under 40 CFR 142.10(b)(4), Primacy States are required to have a principle state laboratory that is certified by the U.S.E.P.A. The Office of Laboratory Services Environmental Microbiology Unit is designated by the U.S.E.P.A. as the principle state laboratory and is therefore responsible for implementing and maintaining the drinking water microbiological certification program for the State of West Virginia. State certification is required for all laboratories that report compliance (with the Safe Drinking Water Act) samples to the state. Compliance samples are monitored and tracked by the Office of Environmental Health Services - Environmental Engineering Division (OEHS-EED).

To maintain status as the principle state laboratory, the Environmental Microbiology Unit must pass a tri-annual on-site evaluation performed by the U.S.E.P.A. Region III's Certification Officer and successfully pass the annual Performance Evaluation (PE) Samples from a certified PE Sample Provider. The Environmental Microbiology Unit must also have the capability for analyzing all of the microbiological contaminants specified in the State Primary Drinking Water Regulations.

The Environmental Microbiology Unit uses the EPA's *Manual for the Certification of Laboratories Analyzing Drinking Water*, Fourth Edition (March 1997) as the minimum standards.

### **II. Laboratory Certification Officer -**

*John*  
Primacy States must designate Laboratory Certification Officer(s) (LCO) that are responsible for overseeing the certification program. For an analyst to be considered for the LCO Position, they must meet the following criteria:

1. Have at least a Microbiologist II Classification.
2. Successfully complete the U.S.E.P.A.'s week long Drinking Water Certification Course that is held annually in Cincinnati, Ohio.
3. Complete several joint on-site evaluations with the Environmental Microbiology Supervisor.

An analyst will become a LCO when the above criteria are met and the supervisor is confident that the analyst can fully function in that capacity. The Laboratory

Certification Officer is a Microbiologist III position.

### **III. Certification Parameters -**

The following are analytes for which certification is offered:

1. Total Coliforms
2. Fecal Coliforms
3. *E. coli*
4. Heterotrophic Bacteria

Below are the approved tests for which the above analytes may be examined:

1. Membrane Filtration
2. Multi Tube Fermentation
3. Chromogenic Fluorogenic Substrate Test
4. Heterotrophic Plate Count - Spread Plate Method

In order for a laboratory to be considered for drinking water microbiological certification, they must have the capability to perform at least one total coliform method and one fecal coliform and/or *E. coli* method.

Lists of certified laboratories are available from the Office of Laboratory Services - Environmental Microbiology Unit and the Environmental Chemistry Unit. The list is also available on the internet at: [http://www.wvdhhr.org/phs/forms/water\\_labs.pdf](http://www.wvdhhr.org/phs/forms/water_labs.pdf).

These lists contain the following information:

1. Name and Address of Laboratory
2. Head of Laboratory
3. Telephone Number
4. West Virginia Certification Number - for in-state laboratories the certification number consists of a 5 digit number beginning with two zeros followed one or two letters in parenthesis. Numbers are assigned in order of acceptance. A (M)

after the number means microbiology only, a (C) after the number means chemistry only and a (C/M) means both chemistry and microbiology. Out-of-State certification numbers are 4 digit numbers beginning with "99". These numbers are also assigned in order of acceptance. The out-of-state numbers are also followed by the same letter designation as the in-state laboratories.

5. Tests for Which Approved - Microbiology is divided into four groups:
- A. Group I - Membrane Filter (Total Coliforms and Fecal Coliform and/or *E.coli*)
  - B. Group II - Heterotrophic Plate Count (Pour Plate Method)
  - C. Group III - Multi Tube Fermentation (Total Coliforms and Fecal Coliforms and/or *E. coli*)
  - D. Group IV - Chromogenic/Fluorogenic Substrate Test (Total Coliforms and *E. coli*)

The list of certified chemistry laboratories is updated by the Environmental Chemistry Unit.

#### IV. Certification Renewal -

Certifications are valid from January 1 thru December 31 of any given year. Each year certified laboratories have the option to renew their certification. There is a \$500.00 annual fee for the Microbiology Certification. For the \$500.00, a laboratory can be certified for any number of Groups (I-IV) within the Microbiology Category. The following table outlines the chain of events for the certification renewal process:

Date	Item Sent	Explanation
By November 1	Attachment #1 & #2	This form gives the laboratory the option to renew certification. It also gives the option to delete or add categories. Based on the previous years certification, it also states the amount due to renew certification.
Between November 1 and December 31		This is the period in which the Office of Laboratory Services receives Attachment #1 and #2 back. The initial packets are received by one of the Microbiology LCOs. They will then mark that laboratory off of the list, verify the amount of the check and make a copy of the check. An LCO will review the information provided on the form. If laboratory submitting the packet is

Date	Item Sent	Explanation
		certified for any chemistry parameters or is requesting to be certified for any chemistry parameters, then a copy of the entire packet is made (including the check) and forwarded to Environmental Chemistry Unit. For certified chemistry laboratories requesting the addition of microbiology certification - See Sections VI and VII. Packets received are placed in a box labeled "(Year) - Certification Renewals" and stored on the Certification File Cabinet.
January 2	Attachment #3	By December 31, any laboratories that have not responded to Attachment #1 will be sent Attachment #3 by certified mail. This document extends the time frame to January 31 after which if the laboratory has not responded, they will be removed from the list of West Virginia Certified Laboratories.
February 1	Attachment #4	Letter (sent by certified mail) informing laboratory that they have been removed from the list of Certified West Virginia Drinking Water Laboratories for failure to remit the annual fee.
February 14	Attachment #5	Certificate and Parameter Sheets are sent to all of the approved laboratories. A copy of the parameter sheets are placed in a three ring binder (labeled <i>Drinking Water Certification - Microbiology Certificates and Parameter Sheets</i> ) and kept in the Environmental Microbiology Office.

The above attachments are stored on Section Supervisor's computer's hard drive in the "Certification Folder". These items are also "Backed-up" on a zip disk labeled "Drinking Water Certification". The following is a list of files on that disk and an explanation:

File Name	Explanation
Parameter [year] Data-[Rev. Date]	Database file containing information on the laboratory. This database file is in spreadsheet form and a copy of this spreadsheet is used as a check-off list. This database must be updated throughout the year and saved using the nomenclature at left.
Certification Renewal Form	This is the form letter which is merged with the above database file. The resulting document is sent to all certified laboratories. Once the two files are merged it is not necessary to save the new document that is created because all of the pertinent information is already saved in the database file. When printing the merged document it is only necessary to print the odd numbered pages (the front page). Page 2 may be copied on the copier.
Cert Renewal Mail Labels	This is the form file that will create the mailing labels. It is also combined with the "Parameter [year] Data-[Rev. Date]" file. The



File Name	Explanation
	resulting merged document is printed on Avery 8160 Labels. It is not necessary to save the merged document.
Information Form - Certification Renewal	This is the form (Attachment #2) that is also sent with the renewals. It allows the certification files to be updated and also the opportunity for the laboratory to add categories or parameters.
[year] Extension Data	This is a database of the laboratories that did not respond by the first deadline.
Extension Form	This is the from letter (Attachment #3) that is merged with the "Extension Form" file. This letter allows for an extension through the month of January.
Removal Notice [year] Data	Database file for all laboratories failing to meet the extended deadline
Removal Form	Form letter for the "Removal Notice [year] Data" file. This letter notifies the laboratory that they have been removed form the list of Certified West Virginia Drinking Water Laboratories for failure to remit the annual fee.

## V. On-Site Evaluations -

On-site evaluation are conducted only for laboratories in the state of West Virginia. Certified Laboratories must pass an on-site evaluation at least once every three years; however, it is preferable to conduct them every two years. Occasionally, some laboratories may warrant an inspection annually (This is usually the result of a high turn-over rate of analysts).

The Laboratory Certification Officer (LCO) is responsible for setting up and conducting the on-site evaluation.

Every January, a list of laboratories that are due for or in need of an on-site evaluation is set up by the Environmental Microbiology Supervisor (Attachment #6). The information on this form gives a date by which the laboratory must be visited, the LCO responsible for that laboratory, and whether an overnight stay will be required.

The following table describes the chain of events for an on-site evaluation:

Time Frame	Item Sent	Explanation
At least 30 days prior to the desired on-site evaluation date.		Contact the laboratory by telephone to discuss a mutually agreed upon date where all of the analysts can be present.

Time Frame	Item Sent	Explanation
At least 30 days prior to the desired on-site evaluation date.	Attachment #7	This is a written confirmation of the date plus a pre-survey information form.
Prior to the on-site		The pre-survey information should be received by the LCO.
Day of the on-site		The on-site is conducted by the LCO using the checklist (Part of Attachment #8). Most on-sites require one and a half days.
Within 3 weeks after the on-site.	Attachment #8	The on-site evaluation narrative report listing the deviations found during the on-site and a completed copy of the checklist. A checklist cover and equipment list are also included.
Within the specified time of the narrative report.		The Laboratory will respond to the deviations on the narrative report
Within 2 weeks after the due date for the response if the response has not yet been received.	Attachment #9	This is a reminder that a response to the narrative is past due.
Within 3 weeks after the response has been received if the response is not acceptable.	Attachment #10	This is a letter stating that there still appears to be some areas of concern.
Within 3 weeks after the response or additional responses have been received and are acceptable.	Attachment #11	This is a letter that states the status of the laboratory.

#### Conducting the On-Site Evaluation -

1. The LCO should be scheduled to arrive at the laboratory no earlier than one half hour after the laboratories normal starting time. Some evaluations are scheduled to start after 1:00 p.m. due to traveling times or other on-sites.
2. This LCO must have the Survey Kit with them. This is a briefcase that contains the following items:
  - A. Certified Maximum Registering Thermometer with Certificate
  - B. Level

- C. Light Meter
- D. 100 mL Class "A" Graduated Cylinder
- E. Stopwatch
- F. Blank Check Lists

Note: The LCO should carry in the brief case the pre-survey information from the laboratory and a copy of the last evaluation.

3. The following gives three scenarios for conducting the on-site evaluations:

- A. The first day is a full day and the second day is one half day -

Day One

Laboratory Debriefing  
Equipment and Facility Check  
Media Preparations  
Records  
Test Procedures

Day Two

Test Procedures  
Records  
Closing Conference

- B. The first day is one half day and the second day is a full day -

Day One

Laboratory Debriefing  
Media Preparations  
Test Procedures

Day Two

Equipment and Facility Check  
Records  
Test Procedures  
Closing Conference

- C. One Day Survey (When the laboratory is certified for only the Chromogenic/Fluorogenic Substrate Test) -

Day One

Laboratory Debriefing  
Equipment and Facility Check  
Records  
Test Procedures  
Closing Conference

**Definitions and Explanations:**

***Laboratory Debriefing:***

Initial conference with laboratory personnel to discuss how the on-site evaluation will proceed and to address any questions and/or concerns.

***Equipment and Facility Check:***

This is accomplished by following the check list (Part of Attachment #8) and using the items in the briefcase. Plating surface must be level and there must be adequate lighting at the work area (minimum of 50 foot-candles). The autoclave must be checked using the stopwatch and the laboratories autoclave thermometer must be checked with the certified thermometer.

***Media Preparations:***

How media is being prepared. This is usually done through records, interviews and/or observations. Note: If Plate Count Agar is need, then is should be made or melted before lunch so that it can temper during lunch

***Records:***

All records from the last survey to the present are reviewed using the checklist.

***Test Procedures:***

All of the analysts present must be observed demonstrating all of the testing procedures. At least one sample each.

***Closing Conference:***

Meeting with the Director, Supervisor and Analysts to discuss the findings of the on-site evaluation. This is also the time to address any question or concerns.

4. The following are the codes for marking the checklist:

**S** = Satisfactory

**X** = Unsatisfactory (Deviation)

**U** = Undetermined

**O** = Not Applicable or Not Used

Note: It is helpful to keep a list of comments and recommendations along with the checklist that can be included in the narrative report.

5. After the on-site evaluation has been completed and the LCO has returned to the Office of Laboratory Services, the check list, checklist cover, equipment list and narrative report must be typed.

Each in-state certified laboratory is assigned a 3.5" computer disk that is labeled with their name. The following table describes the files that are on these disks:

File Name	Description
Check List-1997.ckc	This file is located on the Section Supervisors Computer in the "Survey Forms" Folder in "Water Certification" Folder. It is the on-site check list. It is already filled in with S's and O's so that it will only have to be edited and saved to the A: Drive on the appropriate laboratories diskette using the appropriate nomenclature described in this table.
Check List Cover.ckc	This file is located on the Section Supervisors Computer in the "Survey Forms" Folder in "Water Certification" Folder. It is a blank cover for the check list. It can be filled in and saved to the A: Drive on the appropriate laboratories diskette using the appropriate nomenclature described in this table.
Equipment List.eql	This file is located on the Section Supervisors Computer in the "Survey Forms" Folder in "Water Certification" Folder. It is a blank form for the equipment list. It can be filled in and saved to the A: Drive on the appropriate laboratories diskette using the appropriate nomenclature described in this table.
llllmmyy.ckl	This is the checklist for a particular laboratory on a particular date. The "llll" is a four letter abbreviation for the laboratory, the "mm" is a two digit number for the month of the on-site and the "yy" is a two digit number for the year of the on-site. The ".ckl" stands for checklist. This file is stored on the laboratories 3.5" diskette. For example: The checklist for Tom's Wonderful Lab, Inc. December 1997 on-site would be stored on the diskette labeled "Tom's Wonderful Lab, Inc." as "toms1297.ckl"
llllmmyy.ckc	This is the check list cover for a particular laboratory on a particular date. The "llllmmyy" is the same as above. The ".ckc" stands for check list cover. This file is stored on the laboratories 3.5" diskette.
llllmmyy.eql	This is the equipment list for a particular laboratory on a particular date. The "llllmmyy" is the same as above. The ".eql" stands for equipment list. This file is stored on the laboratories 3.5" diskette.
llllmmyy.nar	This is the narrative report for a particular laboratory on a particular date. The "llllmmyy" is the same as above. The ".nar" stands for narrative report. This file is stored on the laboratories 3.5" diskette.
llllmmyy.fin	This is the final report for a particular laboratory on a particular date. The "llllmmyy" is the same as above. The ".fin" stands for final report. This file is stored on the laboratories 3.5" diskette.
	This is for the request for any additional information for a particular laboratory on a

File Name	Description
llllmmyy.ren	particular date. The "llllmmyy" is the same as above. The ".re" stands for response and the "n" stands for the number of the request. This file is stored on the laboratories 3.5" diskette. For example: if Tom's Wonderful Lab, Inc.'s December 1997 response to the narrative report was inadequate then the request for additional information would be saved as "toms1297.re1"

When writing the narrative report, follow the example in attachment #8. The first section of the narrative report lists the deviation. The second section on the narrative report lists all items that were labeled as Undetermined. The third section on the narrative report lists suggestions and comments. The fourth and last section of the narrative is the conclusion. The conclusion gives the time frame for a response from the laboratory, usually 30, 60 or 90 days. 30 days for more serious deviations that require immediate attention and 60 days for less serious deviations. 90 Days can be used if the laboratory has a problem performing the monthly QC Checks. 90 Days will let the laboratory submit 3 months of records to show that the problem has been corrected. The conclusion also makes reference to what records will have to be sent as proof of correction.

6. The laboratory should respond within the specified time frame. If the response is acceptable (all of the deviation have been corrected) then the final report (Attachment #11) can be sent.

The final report is a modification of the original narrative report. It adds the status of the laboratory. All the deviations, undetermined items and comments and suggestions is left on the report. The conclusion is different. The conclusion states the date that documentation was received and indicates that all of the deviations have been corrected. The conclusion also gives a tentative date as to when the next on-site will be.

If the laboratory does not respond within the specified time frame, then a notice (Attachment #9) will be sent reminding them that their response is past due and a response must be received within one week.

If the laboratories response is not acceptable (all of the deviations have not been corrected) then a letter (Attachment #10) is sent stating that there are still some items of concern. An additional 30 days is usually granted to correct the problems.

7. The above steps are tracked on a chart (Attachment #12) located on the wall in the Environmental Microbiology Office. This chart includes the following:

- A. Date of On-Site
- B. Laboratory Name
- C. Laboratory Certification Officer
- D. Date the Narrative Report/Checklist was Mailed
- E. When the Response is Due
- F. When the Response is Received
- G. Whether the Response was Acceptable, When the Request for Additional Response was Mailed and When Additional Responses are to be Received.
- H. When the Final Report Was Mailed.

#### **VI. Adding A Certified Laboratory (In-State) -**

Requests for becoming certified to perform microbiological analysis of drinking water by the State of West Virginia are received by telephone, written requests and by marking the "Add" category on the certification renewal packets. The following is a list of steps that are required for adding a non-certified laboratory to the list of certified laboratories:

1. If the laboratory is currently certified for one or more of the chemistry parameters, then they should already have a copy of the EPA's Manual for the Certification of Laboratories Analyzing Drinking Water, Fourth Edition (March 1997). If they do not have a copy of the manual, then the first step is to forward them a copy.
2. After the laboratory has reviewed and understands the manual, a records audit can be performed. This is accomplished by requesting that the laboratory send at least the last 6 months worth of records (Quality Control, Sample Accession, Bench Sheets, Samples of Report Forms and results from the most recent PE Study).

After the records have been reviewed by the Laboratory Certification Officer, written comments should be forwarded back to the laboratory within 3 weeks.

3. Once the records are acceptable, an on-site evaluation will be scheduled a mutually agreed upon date. See Section V (On-Site Evaluations).
4. Once all of the deviations have been corrected, an application will be forwarded (Attachment #13).
5. When the completed application and appropriate fee have been received, a

certificate and number (Attachment #5) will be issued. The annual fee for microbiology certification is \$500.00. This fee is pro-rated throughout the year by the following table:

Certification Granted	Fee Required
January, February, March	\$500.00
April, May, June	\$375.00
July, August, September	\$250.00
October, November, December	\$125.00

#### **VII. Adding a Certified Laboratory (Out-of-State) -**

Although West Virginia does not have reciprocity, certification is granted to out-of-state laboratories meeting the requirements.

Requests for becoming certified to perform microbiological analysis of drinking water by the State of West Virginia are received by telephone, written requests and by marking the "Add" category on the certification renewal packets.

When a request is received, the following information is entered on a database called "New Certification Request.dat" in the "Water Certification" Folder on the Section Supervisor's Computer:

1. Date of Request
2. Last Name (Contact Person)
3. First Name (Contact Person)
4. Salutation
5. Laboratory
6. Address
7. City, State, Zip
8. State (Complete Spelling - Not Abbreviated)



This information is merged with the form letter file "Certification Request Form" in the "Water Certification" Folder.

This form letter (Attachment #14) requests certain information. Once the requested information has been received and reviewed, the findings will be forwarded in writing back to the laboratory. If all of the information is acceptable, a letter of acceptance (Attachment #15) will be sent.

The letter of acceptance is comprised of a database file "Certification Acceptance Data" and a form file "Certification Acceptance Letter" in the Water Certification Folder.

The "Certification Acceptance Data" file contains the following information:

1. Salutation
2. First Name (Contact Person)
3. Last Name (Contact Person)
4. Laboratory
5. Street Address
6. City
7. State
8. Zip
9. Date Documentation Was Received
10. Certification Status
11. Procedures
12. Fee Required

Note: The fee is pro-rated using the table in Section VI.

#### **VIII. Performance Evaluation Samples -**

All laboratories certified in West Virginia to analyze drinking water must participate

annually in a Performance Evaluation (PE) Study for each test method that they are certified for. PE Samples for the Heterotrophic Plate Count are not currently required. The PE Samples must be obtained from a certified PE Sample Provider. Certified laboratories must submit PE Results to the LCO annually. Failure to do so will result in that laboratory being downgraded to "Provisionally Certified". The laboratory will be notified by certified mail of their downgraded status. The downgraded laboratory must participate in a PE Study within 30 days of being notified of their downgraded status.

A laboratory that fails a PE Study will not be downgraded to "Provisionally Certified" if they correct the problem and document the reason for failure and it is found acceptable to the LCO. They must also successfully participate in a in another PE Study within 30 days of the failure. If the laboratory would fail the second PE Study, then their status would be downgraded to "Provisionally Certified".

A "Provisionally Certified" Laboratory (as a result of PE Performance) must successfully participate in a PE Study within 30 days of being notified of the downgraded status. If a "Provisionally Certified" Laboratory fails a PE Study, they certification status will be revoked for that particular test method. Full Certification status may be regained upon successful completion of PE Study.

PE Performance for each certified laboratory is tracked on the "Performance Evaluation (PE) Sample Tracking Chart" (Attachment #16) and summerized on the "WV On-Site Evaluation and W.S.M. Schedule" (Attachment #6).

## IX. Record Retention and Storage -

The following table summarizes how records are stored:

Record	Storage
Certification Renewal Forms (Attachment #1)	The blank forms entitled "Certification Renewal Form" are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Completed forms received from laboratories are stored in a folder labeled "[YEAR]-Certification Renewals". Folders are kept in the Certification File Cabinet for at least 10 years.
"Laboratory Information Form" (Attachment #2)	The blank forms entitled "Laboratory Information Form - Certification Renewal" are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Completed forms received from laboratories are stored in a folder labeled "[YEAR]-Certification Renewals". Folders are kept in the Certification

Record	Storage
	File Cabinet for at least 10 years.
Letter - "Extending Certification Renewal Deadline"  (Attachment #3)	The blank forms entitled "Extension Form" are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Two copies of this letter is made; one copy is stored in folder labeled "[YEAR]-Certification Extensions and the other is sent certified mail to the appropriate laboratory. Folders are kept in the Certification File Cabinet for at least 10 years.
Letter - "Removing Certification For Failure To Pay The Certification Renewal"  (Attachment #4)	The blank forms entitled "Removal Form" are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Two copies of this letter is made; one copy is stored in folder labeled "[YEAR]-Decertification and the other is sent certified mail to the appropriate laboratory. Folders are kept in the Certification File Cabinet for at least 10 years.
Database - For Certification Renewals	The Database is entitled "Parameter [YEAR] Data [REV DATE]" and is stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk.
Database - For Certification Renewals (Laboratories Not Meeting The First Deadline)	The Database is entitled "[YEAR] Extension Data" stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Diskettes kept a minimum of 10 years.
Database - For Certification Renewals (Notifying Laboratories That They Are No Longer Certified In West Virginia	The Database is entitled "Removal Notice [YEAR]" and is stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Diskettes kept a minimum of 10 years.
Mail Labels For Certification Renewals	The labels are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. "Parameter [YEAR] Data [REV DATE]" File must be merged with this file. New merged file does not have to be saved. Copies of mail labels are not kept.
Certificates and Parameter Sheets  (Attachment #5)	These are printed by the Environmental Microbiology Supervisor. Originals are sent to the appropriate laboratory and a copy of the Parameter Sheet is kept in a three ring binder labeled "Drinking Water Certification - Microbiology Certificates and Parameter Sheets". At least the last ten years are kept in this binder.
Laboratory Survey Schedule  (Attachment #6)	Current year is posted on the wall in the Environmental Microbiology Office. The originals are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk.
Pre-Survey Information  (Attachment #7)	The blank forms are stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. Completed forms received from laboratories are kept in that laboratories folder. Folders are labeled "[LABORATORY NAME] -

Record	Storage
	DATE(S) OF ON-SITE]" and stored in the Certification File Cabinet for at least ten years.
Narrative Report (Attachment #8)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).nar." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Check List Cover (Attachment #8)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).nar." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Equipment List (Attachment #8)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).eql." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Check List (Attachment #8)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).ckl." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Letter - "Response Past "Due" (Attachment #9)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).re(# of response)." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Letter - "Areas Of Concern" (Attachment #10)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).re(# of response)." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Final Reports (Attachment #11)	Stored on 3.5" diskette labeled with the appropriate laboratories' name. File name "(for letters for the laboratory)(2 digits for month of on-site)(2 digits for year of on-site).nar." Two copies are printed, one kept in appropriate laboratories hanging 3 ring binder in Certification File Cabinet, the other is sent to the appropriate laboratory. Diskettes are kept

Record	Storage
	indefinitely. Copy in hanging 3 ring binder is kept for at least 10 years.
Tracking Chart (Attachment #12)	Posted on wall in Environmental Microbiology Office. The file is stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. File name "Tracking Chart".
Application (New Laboratory) (Attachment #13)	Blank copies are stored in shelves in Environmental Microbiology Office. Completed copies received from laboratories are kept in the laboratories' appropriate folder for at least 10 years.
Letter - "Out-Of-State Requirements" (Attachment #14)	The file is stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. File name "Certification Request Form". This file is merged with the database "Certification Request Data" located on the same diskette. Two copies of the resulting document are printed. One copy is sent to the laboratory requesting to be certified, the other is placed in the laboratories' folder and stored in the Certification File Cabinet.
Letter - "Acceptance For An Out-Of -State Laboratory" (Attachment #15)	The file is stored on the section supervisors computer in the Water Certification Folder and backed up on the Water Certification Zip Disk. File name "Certification Acceptance Form". This file is merged with the database "Certification Data" located on the same diskette. Two copies of the resulting document are printed. One copy is sent to the laboratory meeting the certification requirements, the other is placed in the laboratories' folder and stored in the Certification File Cabinet.



# United States Environmental Protection Agency

This certifies that

✓ THOMAS L. ONG

has satisfactorily completed a training program in  
DRINKING WATER LABORATORY CERTIFICATION COURSE

at

U. S. ENVIRONMENTAL PROTECTION AGENCY

from

to

JULY 20, 1992

JULY 24, 1992

*Robert Bordner*

ROBERT BORDNER  
COURSE DIRECTOR

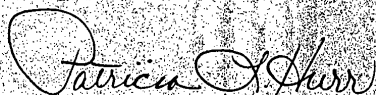


*Evelyn I. Baskin*

EVELYN I. BASKIN  
STATE CERTIFICATION OFFICER

# US Environmental Protection Agency

This is to certify that  
**Larry A. Duffield**  
has satisfactorily completed the prescribed course of study for  
**The Certification of Drinking Water Laboratories for Chemistry  
Inorganic Parameters**  
conducted at the  
**Andrew W. Breidenbach Environmental Research Center  
Cincinnati, Ohio**  
**September 11-15, 2000**



Patricia L. Hurr  
Course Director  
Technical Support Center



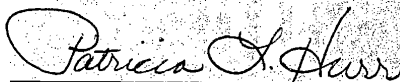
Andrea Labik, Sc.D., Director  
Office of Laboratory Service  
WVA Department of Health and  
Human Resources



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Cincinnati, Ohio**

**June 17-21, 2002**



Patricia L. Hurr  
Course Director  
Technical Support Center  
Office of Ground Water and Drinking Water



Dr. Andrea Labik, Sc.D., Director  
Office of Laboratory Services  
Bureau of Public Health  
WVA Department of Health and Human  
Resources

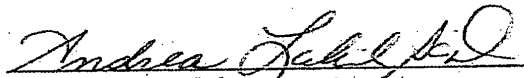
# US Environmental Protection Agency

This is to certify that  
**Michael A. Flesher**  
has satisfactorily completed the prescribed course of study for  
**The Certification of Drinking Water Laboratories for Microbiology**  
conducted at the  
**Andrew W. Breidenbach Environmental Research Center**  
**Cincinnati, Ohio**

June 21-25, 2004



Patricia L. Hurr, Course Director  
Technical Support Center  
Office of Ground Water and Drinking Water




Dr. Andrea Labitt, S.D., Director  
Office of Laboratory Services  
Bureau of Public Health  
WVA Department of Health and Human Resources

# US Environmental Protection Agency

This is to certify that  
**Gregory Wayne Young**  
has satisfactorily completed the prescribed course of study for  
**The Certification of Drinking Water Laboratories for Chemistry  
Inorganic Parameters**

conducted at the  
**Andrew W. Breidenbach Environmental Research Center  
Cincinnati, Ohio**

**June 17-20, 2003**



Patricia L. Hurr  
Course Director  
Technical Support Center  
Office of Ground Water and Drinking Water



Dr. Andrea Labik, Sc.D., Director  
Office of Laboratory Services  
Bureau of Public Health  
WVA Department of Health and Human  
Resources

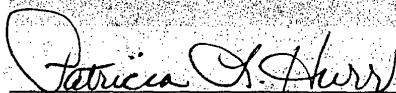
# U.S. Environmental Protection Agency

This is to certify that  
**Gregory Wayne Young**  
has satisfactorily completed the prescribed course of study for

**The Certification of Drinking Water Laboratories for Chemistry  
Organic Parameters**

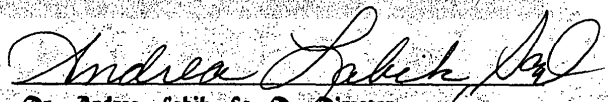
conducted at the  
**Andrew W. Breidenbach Environmental Research Center  
Cincinnati, Ohio**

**May 1-5, 2006**



Patricia Hurr, Course Director  
Technical Support Center  
Office of Ground Water and Drinking Water





Dr. Andrea Labik, Sc. D., Director  
Office of Laboratory Services, Bureau of Public  
Health  
West Virginia Dept. of Health & Human Resources


# **US Environmental Protection Agency**

This is to certify that  
**Patrick Lee Marchio**  
has satisfactorily completed the prescribed course of study for

**The Certification of Drinking Water Laboratories for Chemistry  
Inorganic Parameters**

conducted at the  
**Andrew W. Breidenbach Environmental Research Center  
Cincinnati, Ohio**

**May 1-5, 2006**



**Patricia Gurr, Course Director  
Technical Support Center  
Office of Ground Water and Drinking Water**



**Dr. Andrea Labik, Sc. D., Director  
Office of Laboratory Services, Bureau of Public  
Health  
West Virginia Dept. of Health & Human Resources**

# **Ex. 5 - Deliberative**

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